Assessing The Awareness And Prevalence Level Of Obesity Among Adolescents And Adults In Ajara– Badagry, Lagos State, Nigeria.

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Abstract

This project focused on the awareness and prevalence level of obesity among adolescent and adults in Ajara community, Badagry local government area of Lagos State Nigeria. The project was carried out employing a simple survey method and random sampling technique as sampling and data collection tools. Height and weight of study participants were measured to calculate their Body Mass Index (BMI). The World Health Organization (WHO) classification of obesity using BMI was then used to determine the obesity status. A simple pre tested questionnaire was also used to collate information on the awareness of obesity from the respondent. The result shows that about one tenth (13.5%) of the study population were obese, more than half (53.9%) were aware that obesity can lead to death however majorities (90.8%) have not done any test to check their obesity status. The prevalence level (13.5%) from this study is in agreement with the 12% prevalence rate reported by Nkwoka I.J, Egua M.O, et al (2014) as well as within the range of 8.1% - 22.2% defined by Chukwuonye I.I, ChukuA.et al in 2013.

Keywords: Obesity, Prevalence, Nigeria.

Introduction

Obesity impacts negatively on individual and national resources. Although no record was found from the researched literatures concerning the cost estimate for obesity in Nigeria; the costs may run into several billions of naira a year. There is a need for urgent intervention to prevent future implications on health care expenditure as well as overall development of the nation. This capstone project was conducted to in order to assess the awareness and prevalence level of obesity and use the study as an educational tool to provide information on the epidemiology, risk factor and prevention of obesity.

Methodology

This project work was carried out using simple random sampling technique. The participants were selected during their attendance at the clinic and the venue for the religious activity. A simple questionnaire was developed to collate information on the subject from the respondent. The questionnaire comprises of three major segments; social demography, awareness of obesity and risk factors of obesity. All volunteered men and women in this category, were sampled with their weight and height measured using a stadiometer, they were also asked to complete the developed questionnaires with assistance provided by the trained research assistants. The body mass index was used to define obesity and this was calculated by dividing the weight of individual participants (in Kilogram) by the square of their heights in centimeters. The WHO cutoff for BMI was then used to classify them into underweight, normal range, overweight and obese. The participants were also provided with WHO fact sheet on obesity as educational material. Each interviewer/research assistant and the principal investigator, making 4, worked as a team (in pairs) and carry out the measurement and interview for 4 days : 1 day for the community gathering and 3 days at the clinic setting until a total of 152 sample size was obtained.

Results

Table 1. Socio demographic characteristics of respondents

QUESTIONAIRE ITEMS	FREQUENCY	PERCENTAGE (%)
AGE GROUP		
13-19	14	9.2
20-30	32	21.1
31-40	42	27.6
41-50	26	17.1
51-60	20	13.2
60-70	10	6.6
NR	8	5.2
TOTAL	152	100
OCCUPATION		
Trading	48	31.6
Civil servant	30	19.7
Self employed	50	32.9
Student	14	9.2
Clergy	10	6.6
TOTAL	152	100
MARITAL STATUS		
Single	32	21.1
Married	120	78.9
TOTAL	152	100
GENDER		
Male	68	44.7
Female	70	46.1
NR	14	9.2
TOTAL	152	100
LEVEL OF EDUCATION		
NONE	6	3.9
PRIMARY	32	21.1
SECONDARY	50	32.9
UNIVERSITY	38	25
POST GRADUATE	4	2.6
NR	22	14.5
TOTAL	152	100

Only about one tenth (9.2%) of the respondents were teenagers while the rest were adults in the following age brackets: 20-30 (21.1%), 31-40 (27.6%), 41 – 50 (17.1%), 51-60 (13.2%) and 61 – 70 (6.6%). Eight respondents (5.2%) did not indicate their age. A larger percentage of the respondents were either self-employed (32.9%) or traders (31.6%) while the rest were civil servants (19.7%), students (9.2%) or clergy (6.6%). Majorities (78.9%) were married while the remaining 21.1% were singles; 46.1% were females, 44.7% male and 9.2 % did not indicate their gender.

Table 2. Awareness of obesity as a public health disorder

QUESTIONAIRE ITEMS	FREQUENCY	PERCENTAGE (%)
Have you heard the word obesity before?		
YES	88	57.9
NO	64	42.1
TOTAL	152	100
Have you received any public lecture on obesity?		
YES	70	46.1
NO	82	53.9
TOTAL	152	100
Do you know the meaning, causes and prevention of obesity?		
YES		
NO	52	34.2
TOTAL	100	65.8
	152	100
Do you have any family history of obesity?		
YES	40	26.3
NO	112	73.7
TOTAL	152	100
Are you aware that obesity can lead to death?		
YES	82	53.9
NO	70	46.1
TOTAL	152	100
Do you know how obesity can be diagnosed?		
YES	36	23.7
NO	116	76.3
TOTAL	152	100
Have you done any test to check your obesity status?		
YES	14	9.2
NO	138	90.8
TOTAL	152	100

Only 57.9% of the respondents claimed to have heard about Obesity while 42.1% have not heard about it before. Almost half of the respondent (46.I%) had received public lecture on Obesity, 53.9% have not. 34.2% claimed to know the meaning, causes and prevention of Obesity while 65.8% claimed not to know. Only about a quarter (26.3%) of the respondents have family history and more than half (53.9%) are aware that Obesity can lead to death. Majority (76.3%) of the respondents know how Obesity can be diagnosed while the remaining 23.7% do not know how it is diagnosed. A larger proportion of the respondents (90.8%) have not done any test to check their Obesity status while about One tenth (9.2%) have done test to check their Obesity status.

Table 3. Respondents' association with risk factors of obesity

QUESTIONAIRE ITEMS	FREQUENCY	PERCENTAGE (%)
Does your routine work restrict you to a sitting position		
YES	56	36.8
NO	96	63.2
TOTAL	152	100
Do you have at least 30 minutes for daily exercise?		
YES	84	55.3
NO	68	44.7
TOTAL	152	100
Mode of transport for routine movement		
Personal car	18	11.8
Buses	12	7.9
Motorcycle/tricycle/bicycle	48	31.6
Walking	74	48.7
Total	152	100
Time of dinner		
Before 7pm	90	59.2
After 7pm	62	40.8
Total	152	100
Consumption of pastries/fast food		
Daily	16	10.5
Weekly	12	7.9
Occasionally	106	69.7
Never	18	11.9
Total	152	100
Does income determine regular consumption of pastries/fast food?		
YES	22	14.5
NO	130	85.5
TOTAL	152	100

About 63.2% of the respondents claimed that their routine work does not restrict them to a sitting position while 36.8% claimed to be restricted to a sitting position by their routine work. More than half (55.3%) claimed to have at least 30 minutes of daily exercise, 44.7% claimed not to. Almost half of the respondents (48.7%) walk on feet as a mode of routine movement, 31.6% use either motorcycle, tricycle or bicycle. 11.8% use their personal car while 7.9% use buses. More than half (59.2%) claimed to have dinner before 7pm while 40.8% have their dinner after 7pm. Majority of the respondents (69.7%) claimed to consume pastries/fast food occasionally, 10.5% consume pastries/fast food daily, 7.9% consume pastries/fast food weekly while the remaining 11.9% never consume pastries/fast food at all.

Table 4. Body mass index (BMI) result of respondents. (WHO classification[28])

BMI CLASSIFICATION	FREQUENCY	PERCENTAGE (%)
Underweight (BMI <18.5)	16	10.8
Normal Range (BMI = 18.5 – 24.9)	38	51.4
Overweight/Pre Obese (BMI = 25 – 29.2)	18	24.3
Obese (BMI ≥30)	10	13.5

About one tenth (13.5%) of the study population were obese; almost half (51.4%) have their BMI within the normal range, 24.3% were overweight and the remaining 10.8% were underweight according to WHO classification of obesity using BMI values.

Discussion and Conclusion

This study assessed the awareness and prevalence level of obesity among adolescent and adults in Ajara community, Badagry local government area of Lagos State Nigeria.

About one tenth (13.5%) of the study population were found to be obese in the following categories; class I (50%), class II (30%) and class III (20%). This particular finding is in agreement with previous studies conducted on the prevalence level of obesity where it was reported that the prevalence of obesity among adult population was estimated at 10% in West Africa[20] and 8.1% – 22.2% in Nigeria[22].

Only about a quarter (26.3%) of the respondents claimed to have family history of obesity, however 70% of the number found to be obese in the study do not have any family history of obesity. This may be interpreted (though insufficient data) that family history only have about 30% association with development of obesity in an individual.

Though more than half (53.9%) were aware (based on this study) of the health implication of obesity, a greater percentage (90.8%) have not done any test to check their obesity status, it is believed therefore that projects like this will increase the awareness level on obesity and with the distribution of the fact sheet, respondents will be able to tell more people about obesity. The overall health benefit expected is reduction in mortality rate due to obesity.

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